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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,970	03/31/2004	Paul Philip Brown	155-21	5922
22653	7590	07/06/2005	EXAMINER	
EDWARD W CALLAN NO. 705 PMB 452 3830 VALLEY CENTRE DRIVE SAN DIEGO, CA 92130			FONTAINE, MONICA A	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,970

Applicant(s)

BROWN ET AL.

Examiner

Monica A. Fontaine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 5-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Neter et al. (U.S. Patent 6,475,415).

Regarding Claim 4, Neter et al., hereafter "Neter," show that it is known to carry out a process of manufacturing a hollow plastic product with a substantially tubular section and a thread at the outside of the one end of the product (Abstract), the process comprising the steps of providing a cavity mold part with a generally cylindrical portion for forming at least an outside segment of the substantially tubular section of the product and a thread-forming portion for forming the thread of the product (Figure 2, elements 13, 16); providing a core mold part with a generally cylindrical portion for forming at least an inside segment of the substantially tubular section of the product and a movable inner core for forming a portion of the product lying inside the thread when the inner core is protracted (Figure 2, element 18); combining the cavity mold part with the core mold part and protracting the inner core to configure a mold cavity for forming the product (Figure 2); injecting plastic material into the mold cavity to form the molded plastic product (Column 7, line 60); and retracting the inner core and separating the core mold

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part from the cavity mold part to thereby remove the thread from the thread-forming portion of the cavity mold part while retaining the molded product on the core mold part (Column 7, lines 62-65).

Regarding Claim 15, Neter shows that it is known to have an apparatus for manufacturing a hollow plastic product with a substantially tubular section and a thread at the outside of one end of the product (Abstract), comprising a cavity mold part with a generally cylindrical portion for forming at least an outside segment of the substantially tubular section of the product and a thread forming portion for forming the thread of the product (Figure 2, elements 13, 16); a core mold part with a generally cylindrical portion for forming at least an inside segment of the substantially tubular section of the product and a movable inner core for forming a portion of the product lying inside the thread when the inner core is protracted (Figure 2, element 18); wherein a mold cavity for forming a molded product with a substantially tubular section and a thread at the outside of the one end of the product is configured when the cavity mold part is combined with the core mold part and the inner core is protracted, and the molded product is formed by injecting plastic material into the mold cavity (Figure 2; Column 7, line 60); and means for separating the core mold part from the cavity mold part after the inner core is retracted to thereby remove the thread from the thread-forming portion of the cavity mold part while retaining the molded product on the core mold part (Column 7, lines 62-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buhler et al. (U.S. Patent 5,346,659), in view of Dutt (U.S. Patent 4,743,420).

Regarding Claim 1, Buhler et al., hereafter "Buhler," show that it is known to carry out a process of manufacturing a hollow plastic product with two open ends and a substantially tubular section (Abstract), the process comprising the steps of providing a cavity mold part with a generally cylindrical portion for forming at least an outside segment of the substantially tubular section of the product (Figure 3, element 16); providing a core mold part with a generally cylindrical portion for forming at least an inside segment of the substantially tubular section of the product (Figure 3, element 12); combining the cavity mold part with the core mold part to configure a mold cavity for forming a product with one open end, one closed end, and a substantially tubular section (Figure 2; Column 3, lines 34-37); injecting plastic material into the mold cavity to form the molded plastic product (Column 3, lines 31-34); separating the core mold part from the cavity mold part while retaining the molded product on the core mold part (Column 4, lines 15-16); and removing at least a portion of the closed end of the molded product to provide the molded product with two open ends and a substantially tubular section (Column 4, lines 17-21). Buhler does not show injecting compressed air to help with product removal. Dutt shows that it is known to mold a substantially tubular article including injecting compressed air into the closed end of the molded product (Column 6, lines 4-6). Dutt and Buhler are combinable because they are concerned with a similar technical field, namely, methods of making substantially tubular articles. It would have been prima facie obvious to one of

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ordinary skill in the art at the time the invention was made to use Dutt's compressed air during Buhler's ejection process in order to help remove the molded product from the core mold part.

Regarding Claim 2, Buhler shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show injecting compressed air through the core mold part. Dutt shows that it is known to carry out a method including injecting compressed air through the core mold part into the closed end of the molded product (Figure 4, element 38; Column 6, lines 4-6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Dutt's compressed air during Buhler's ejection process in order to help remove the molded product from the core mold part.

Regarding Claim 12, Buhler shows that it is known to have an apparatus for manufacturing a hollow plastic product with two open ends and a substantially tubular section (Abstract), comprising a cavity mold part with a generally cylindrical portion for forming at least an outside segment of the substantially tubular section of the product (Figure 3, element 16); a core mold part with a generally cylindrical portion for forming at least an inside segment of the substantially tubular section of the product (Figure 3, element 12); wherein a mold cavity for forming a molded product with one open end, one closed end, and a substantially tubular section is configured when the cavity mold part is combined with the core mold part, and the molded product is formed by injecting plastic material into the mold cavity (Figure 3; Column 3, lines 31-37); and means for removing at least a portion of the closed end of the molded product to provide the molded product with two open ends and a substantially tubular section (Column 4, lines 17-21). Buhler

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does not show means for injecting compressed air to help with product removal. Dutt shows that it is known to have a mold a substantially tubular article including means for injecting compressed air into the closed end of the molded product after the core mold part has been separated from the cavity mold part while retaining the molded product on the core mold part (Column 6, lines 4-6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to provide for Dutt's compressed air in Buhler's apparatus in order to help remove the molded product from the core mold part.

Regarding Claim 13, Buhler shows the apparatus as claimed as discussed in the rejection of Claim 1 above, but he does not show means for injecting compressed air through the core mold part. Dutt shows that it is known to carry out a method including means for injecting compressed air through the core mold part into the closed end of the molded product (Figure 4, element 38; Column 6, lines 4-6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to provide for Dutt's compressed air in Buhler's apparatus in order to help remove the molded product from the core mold part.

Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buhler and Dutt, further in view of Neter.

Regarding Claim 3, Buhler shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show forming a product with threads. Neter shows that it is known to carry out a method wherein the product further includes a thread at the outside of one end of the product, wherein step (a) comprises the step of providing

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a said cavity mold part that includes a thread forming portion for forming the thread of the product (Figure 2, elements 13, 16); wherein step (b) comprises the step of providing a said core mold part that includes a movable inner core for forming a portion of the product lying inside the thread when the inner core is protracted (Figure 2, element 18); wherein step (c) further comprises the step of protracting the inner core to further configure the mold cavity for forming the product (Figure 2, element 18); wherein the process further comprises subsequent to injecting of the plastic according step (d), retracting the inner core (Column 7, lines 63-65); and wherein separation of the core mold part from the cavity mold part according to step (e) thereby removes the thread from the thread-forming portion of the cavity mold part (Column 7, lines 63-65). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to include Neter's thread forming steps during Buhler's and Dutt's molding process in order to obtain an article suitable for various closeable container applications.

Regarding Claim 14, Buhler shows the apparatus as claimed as discussed in the rejection of Claim 12 above, but he does not show an apparatus that can form threads in an article. Neter shows that it is known to have an apparatus wherein the product further includes a thread at the outside of one end of the product, wherein the cavity mold part includes a thread-forming portion for forming the thread of the product (Figure 2, element 13, 16); wherein the core mold part includes a movable inner core for forming a portion of the product lying inside the thread when the inner core is protracted (Figure 2, element 18); wherein the mold cavity for forming the molded product with a thread at the outside of one end of the product is configured when the cavity mold part is combined

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with the core mold part and the inner core is protracted (Figure 2); wherein the apparatus comprises means for separating the core mold part from the cavity mold part after the inner core is retracted while retaining the molded product on the core mold part (Column 7, lines 60-65). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Neter's thread forming part in Buhler's and Dutt's molding apparatus in order to be able to obtain an article suitable for various closeable container applications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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June 30, 2005



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SUPERVISORY PATENT EXAMINER